

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-97. Cancelled.

98. (New) A method of for adaptively scheduling robot tasks for a robot coupled to a stainer, wherein the robot processes slides in the stainer according to a protocol, the method comprising the steps of:

introducing a first at least one slide into the stainer, the stainer being configured to process the first at least one slide using a plurality of desired slide process operations comprising one or more robot tasks;

creating a robot task list of the one or more robot tasks for the stainer;

processing the first at least one slide according to the robot task list;

during processing of the first at least one slide according to the robot task list, receiving a second at least one slide into the stainer; and

adaptively rescheduling the robot tasks of the robot task list to create an altered robot task list of the one or more robot tasks for the stainer.

99. (New) A method according to claim 98, wherein robot tasks include applying a reagent to the at least one slide.

100. (New) A method according to claim 98, further comprising the step of discontinuing processing of the first at least one slide according to the robot task list and commencing processing of the first at least one slide according to the altered robot task list.

101. (New) A method according to claim 98, wherein rescheduling includes running one or more simulations using varied schedules in order to determine the altered robot task list.

102. (New) A method according to claim 98, wherein adaptively rescheduling comprises:

determining a robot task priority for each robot task in the robot task list; and
sorting the robot task list in order of robot task priority.

103. (New) A method according to claim 98, wherein the steps are performed automatically by the stainer.

104. (New) A method according to claim 98, wherein the at least one slide includes a sample.